IN THE CLAIMS:

Claims 12-18 and 20-23 are pending in this application. Please amend claims 12-13, and add new claims 20-23 as follows:

1 - 11. (Cancelled)

12. (Currently Amended) An optical transmitter-receiver, comprising:

an optical transmitter, said optical transmitter comprising:

a semiconductor laser light source; and

a traveling-wave optical modulator for modulating output light of the semiconductor laser light source, wherein:

said traveling-wave optical modulator comprises

an external semiconductor modulator disposed on a first substrate, said external semiconductor modulator being capable of modulating output light of the semiconductor laser light source, the external semiconductor modulator comprising an optical interference waveguide and a plurality of separated electrodes being disposed on an optical interference waveguide cyclically, ~~and~~

a high-frequency line disposed on a second substrate separated from the first substrate,

a plurality of separated electrodes being disposed cyclically on a part of the high-frequency line corresponding to the external semiconductor modulator, the first substrate being fixedly secured to the second substrate with an active layer side of the external semiconductor modulator disposed on the first substrate and a high-frequency line side of the second substrate facing each other so that each separated electrode disposed on the optical interference waveguide is fixedly secured on the high-frequency line through the corresponding separated electrodes disposed on the high-frequency line each other,[[;]] and

in said traveling-wave optical modulator, a control electrode for the external semiconductor modulator, which is included in the external semiconductor modulator, is electrically connected to the high-frequency line; and

an optical receiver, said optical receiver comprising:

a light receiving element disposed on a third substrate;

a high-frequency line disposed on a fourth substrate separated from the third substrate; ~~and~~

a traveling-wave optical modulator in which an electrode used for detecting an electric output of the light receiving element is electrically connected to the high-frequency line[[,]];

a plurality of separated electrodes being disposed cyclically on a part of the high-frequency line corresponding to the traveling-wave optical modulator, the traveling-wave optical modulator comprising an optical interference waveguide; and

a plurality of separated electrodes being disposed on the optical interference waveguide cyclically, said electrode being included in the light receiving element,

wherein the third substrate is fixedly secured to the fourth substrate with an active layer side of the light receiving element disposed on the third substrate and a high-frequency line side of the fourth substrate facing each other so that each of the separated electrode disposed on the optical interference waveguide is fixedly secured on the high-frequency line through the corresponding separated electrodes disposed on the high-frequency line each other.

13. (Currently Amended) An optical receiver, comprising:

a light receiving element disposed on a first substrate;

a high-frequency line disposed on a second substrate separated from the first substrate; and

a traveling-wave optical modulator in which an electrode used for detecting an electric output of the light receiving element is electrically connected to the high-frequency line, ~~said electrode being included in the light receiving element~~ wherein said traveling-wave optical modulator comprises optical interference waveguides and a plurality of separated electrodes being disposed on the optical interference waveguides cyclically, said high-frequency line has a plurality of separated electrodes cyclically on a part of the high-frequency line corresponding to the traveling-wave optical modulator, and the first substrate is fixedly secured to the second substrate with an active layer side of the light receiving element disposed on the first substrate and a high-frequency line side of the second substrate facing each other so that each of the separated electrode disposed on the optical interference waveguide is fixedly

secured on the high-frequency line through the corresponding separated electrode disposed on high-frequency line each other.

14. (Original) An optical receiver according to Claim 13, wherein:

the first substrate is fixedly secured to the second substrate with an active layer side of the light receiving element disposed on the first substrate and a high-frequency line side of the second substrate facing each other.

15. (Original) An optical receiver according to Claim 14, wherein:

the light receiving element has a plurality of light receiving areas that are disposed at predetermined intervals cyclically; and

said optical receiver comprises a traveling-wave optical modulator to which an electrode used for detecting each electric output of the light receiving element is electrically connected, said each electric output being produced in each of the plurality of light receiving areas.

16. (Original) An optical receiver according to Claim 14, wherein:

a preamplifier circuit is disposed on the second substrate; and

an input portion of the preamplifier circuit is electrically connected to the high-frequency line.

17. (Original) An optical receiver according to Claim 15, wherein:

a preamplifier circuit is disposed on the second substrate; and

the preamplifier circuit uses a traveling-wave type input mode, and an input portion of the preamplifier circuit is electrically connected to the high-frequency line.

18. (Previously Presented) An optical transmitter according to Claim 12, wherein:

the first substrate and the third substrate are common; and

the second substrate and the fourth substrate are common.

19. (Withdrawn) A method for manufacturing an optical device comprising the steps of:

measuring an additive capacity value of a semiconductor optical element after a wafer process for the semiconductor optical element is completed;

selecting or manufacturing a high-frequency element mounting substrate, on which a high-frequency line having the most appropriate characteristic impedance value is formed, on the basis of the additive capacity value; and

electrically connecting the semiconductor optical element to the high-frequency element mounting substrate after that.

20. (New) An optical transmitter-receiver according to claim 12, wherein

the second substrate and the forth substrate are the same substrate.

21. (New) An optical transmitter-receiver, comprising:

an electric input portion,

an optical mounted portion,

a terminal portion formed on a dielectric substrate, said terminal portion including a pair of high-frequency lines, said high-frequency lines having a plurality of separated electrodes cyclically on a part corresponding to said optical mounted portion, and

an optical modulation element formed on a semi-insulating substrate, said optical modulation element comprising a plurality of separated electrodes of said optical modulation element corresponding to a plurality of the separated electrodes formed on said high-frequency lines,

wherein the dielectric substrate is fixedly secured to the semi-insulating substrate so that the separated electrodes of said optical modulation element are fixedly secured to the corresponding separated electrodes formed on said high-frequency lines, and

each of characteristic impedances of said electric input portion, said optical mounted portion and said terminal portion is designated so that that V_{opt} is almost equivalent to V_{ele}, wherein V_{opt} is a value of Co (light velocity)/neff(effective refractive index of a semiconductor waveguide), and V_{ele} is a value of high-frequency phase velocity.

22. (New) An optical transmitter-receiver according to claim 21, wherein the pair of high-frequency lines has a terminal resistance value of approximately 50.0.

23. (New) An optical transmitter-receiver according to claim 21, wherein the characteristic impedance for said electric input portion, said optical mounted portion and said terminal portion are 50Ω, 76 Ω and 50 Ω, respectively.